

**April 14, 2010 DRAFT**  
**Proposed Revisions to the Zoning and Subdivisions Regulations:**  
**Aquifer and Public Water Supply Well Protection**

(New provisions are underlined or otherwise indicated)

(Deletions are bracketed or otherwise indicated)

(Explanatory Notes are provided to assist with an understanding of the proposed revisions. These notes are not part of the proposed zoning revision)

**A. Proposed Zoning Regulation Revisions:**

1. Revise Article V, Section A.3. as follows:

a. Revise subsection d.10 to read as follows:

Watercourses, swamps and other water related features, specifically including, regulated inland wetlands, flood hazard areas, state designated channel encroachment lines and identified aquifers on the site or [adjacent to] within 500 feet of the site. For more information on flood hazard areas see Article X, Section E and Article IV (definition of flood hazard area). For more information on aquifer areas see Article VI, Section B.4.m.

b. Revise subsection d.12 to read as follows:

Waste disposal and water supply facilities, including the locations and findings of all test pits, borings and percolation tests, and the location of public drinking water wells within 500 feet of the site.

c. Revise subsection g to read as follows:

**Other information:** Dependent on the nature of the proposal, the Commission shall have the right to require additional detailed information if it finds the information is necessary to review the application and determine compliance with applicable regulations and performance standards. Such information may include but shall not be limited to: traffic impact analysis, including specific information on how construction traffic will be regulated, routed and monitored; aquifer, watershed and flooding data; drainage calculations and documentation of necessary drainage rights or easements; environmental and neighborhood impact analysis; erosion and sedimentation control plans, future plans for adjacent land under the control of the subject applicant or owner; information on homeowner or property-owner associations; maintenance provisions; estimates of site improvements costs, and bonding agreements.

2. Revise Article V, Section A.5.d. to read as follows:

The proposal has made safe and suitable provisions for water supply, waste disposal, flood control, fire and police protection, the protection of the natural environment, including air quality and surface and groundwater quality and the protection of existing aquifers and existing and potential public water supplies, cemeteries, historic structures and other features of historic value;

3. Revise Article V, Section B.3.g. to read as follows:

**Other information:** Dependent on the nature of the proposal, the Commission shall have the right to require additional detailed information if it finds the information is necessary to review

the application and determine compliance with applicable regulations and performance standards. Such information, which through other provisions of these regulations may be required for particular uses, may include but shall not be limited to: architectural plans of all proposed buildings, structures and signs, including exterior elevations, floor plans, perspective drawings and information on the nature and color of building materials; traffic studies; aquifer, watershed and flooding data; drainage calculations and documentation of necessary drainage rights or easements; environmental and neighborhood impact analysis; erosion and sedimentation control plans; future plans for adjacent land under the control of the subject applicant or owner; information on homeowner or property owner associations; maintenance provisions; estimates of site improvement costs and bonding agreements.

4. Revise Article VI, Section B.4.m. to read as follows:

**Aquifer Areas** - To prevent or minimize detrimental effects on the groundwater quality within aquifer areas, which are existing or potential sources of [large] significant quantities of potable water, land use activities on or within 500 feet of identified aquifer areas must be carefully reviewed and appropriately regulated. Accordingly, the following requirements shall apply to all land use activities on or within [primary or secondary recharge areas] 500 feet of aquifer areas as identified in Mansfield's Plan of Conservation and Development, Mansfield's Water Supply Plan, an October, 1979 map entitled GROUNDWATER RECHARGE AREAS, prepared by the Connecticut Area-wide Waste Treatment Management Planning Board, sheets 40, 41, 55 and 56, (on file in the Mansfield Planning Office and the Town Clerk's Office), [as may be modified by new] and any additional information obtained from the State Department of Environmental Protection, [the Tolland County Soil and Water Conservation District,] federal agencies or on-site investigation [meeting the standards of the U.S. Geological Survey].

1. No commercial or industrial land use and no residential land use involving three or more dwelling units, which utilizes an on-site waste disposal system, shall be permitted unless it can be demonstrated to the satisfaction of the Planning and Zoning Commission that the waste disposal system discharges will not contaminate aquifer recharge areas. As deemed [necessary] appropriate, the proposed land use shall be referred to the Mansfield Health Officer, the Mansfield Conservation Commission and the State Departments of Health and Environmental Protection for review comments. A written report from the owner-developer's sanitary engineer and/or geologist or other qualified professional, detailing the system design, the physical characteristics of the area, existing land uses in the area, and potential short-term and cumulative impacts on identified aquifer areas, shall be submitted to the Commission.
2. No underground fuel or chemical storage tanks shall be permitted, except after review and approval of the Mansfield Building Inspector and Fire Marshal. Where Planning and Zoning Commission approval is required for the subject use, all underground storage tanks must also be approved by the Commission. All such tanks and pipe connections shall be designed and constructed to prevent accidental contamination of groundwater. All storage tank facilities shall be designed and installed in conformance with [the] all applicable provisions of [Section 29-62 of] the State Statutes and regulations, and the standards of Underwriters Laboratories, Inc. and the National Fire Prevention Association. [The recommended standards contained in the November 1979 report of the Area Waste Treatment Management Planning Board entitled: A GUIDE TO GROUNDWATER AND AQUIFER PROTECTION (copy on file in the Mansfield Planning Office) shall also be considered.]

3. All agricultural operations must employ best management practices, as recommended by the State Department of Environmental Protection and the USDA Natural Resources Conservation Service [Tolland County Soil and Water Conservation District], for the application of manure, fertilizer or pesticides and the management of animal wastes.
4. No road salt storage and loading facilities shall be permitted except after review and approval of the State Department of Environmental Protection. Where authorized, adequate measures must be taken to prevent groundwater contamination and to detect potential contamination problems.
5. All commercial, industrial or multi-family developments and other land uses with cumulatively more than 1/2 acre of impervious surface shall incorporate best management practices for storm water [management] controls in accordance with State Department of Environmental Protection Best Management Guidelines, [such as oil/water separators and infiltration structures] and shall prohibit or restrict the use of salts and chemicals for ice removal in order to minimize the risks of ground water contamination. A storm water management plan detailing proposed provisions shall be submitted for Commission approval.
6. All land uses involving the maintenance of lawns, fields and landscaped areas shall incorporate-rate landscape management plans regarding the use of fertilizers, pesticides, and other organic or chemical applications to minimize the risks of groundwater contamination. A landscape management plan detailing proposed provisions shall be submitted for Commission approval.

**B. Proposed Subdivision Regulation Revisions:**

1. Revise Section 5.2 to add a new subsection h. to read as follows (existing subsection h - m to be re-lettered i - n):
  - a. Aquifer areas and public drinking water wells on or within 500 feet of a site.
2. Revise Section 6.5 as follows:
  - a. Add a new subsection h to read as follows (existing subsection h - s to be re-lettered i - t):
    - h. Aquifer areas and public drinking water wells on or within 500 feet of a site.
  - b. Revise existing subsection i.5 (to be re-lettered 6.5.j.5) to read as follows:
    5. Soil delineations and symbols as per the current U.S.D.A. Natural Resources Conservation Service Soil Survey for Tolland County. Prime farmland soils and stratified drift aquifer areas shall be [delineated] specifically identified and clearly labeled.
3. Revise Section 7.1 Subsections b and c to read as follows:

- b. The protection of existing and potential public water supply wells and ground water and surface water quality through appropriate design and installation of sanitary systems, drainage facilities, and other site improvements;
  - c. The protection and enhancement of natural and manmade features, including aquifer areas, agricultural lands, hilltops or ridges, expanses of valley floors and features along existing roadways and scenic views and vistas on and adjacent to the subdivision site;
4. Revise Section 7.2 a and b to read as follows:
- a. Property boundaries, site topography soil types, natural and manmade features and scenic views and vistas should be delineated: (see provisions of 6.5.b through [i]);
  - b. Significant natural and manmade features, including aquifer areas, agricultural lands, hilltops or ridges, expanses of valley floors and features along existing roadways and scenic views and vistas and adjacent to the subdivision site, and scenic views and vistas and appropriate buffer areas should be incorporated into proposed open space areas.
5. Revise Section 7.4.a.5 to read as follows:
- 5. The site's location with respect to the Willimantic Reservoir Watershed, existing public water supply wellfields or [stratified drift] aquifer areas that may serve as future public water supply wellfields;
6. Revise Section 7.6.a. to read as follows:
- a. The Commission determines that a reduction or waiver will help protect significant natural and manmade features, including aquifer areas, agricultural lands, hilltops or ridges, expanses of valley floors and features along existing roadways and/or scenic views and vistas;
7. Revise 13.1.4.b. to read as follows:
- b. Protecting and conserving natural and manmade features, including aquifer areas, agricultural lands, hilltops or ridges, expanses of valley floors and features along existing roadways, and/or scenic views and vistas;

Explanatory note: The proposed revisions are designed to clarify and strengthen existing policies regarding aquifer and public water supply well protection.